

Laurel Avenue Street Trees

1. Zelkova 7.25" DBH (diameter) overall health: good
comments:
 - some heat stress visible at top of canopy
2. Black oak 5.25" DBH overall health: poor
comments:
 - very large wound at base (probably mechanical)
 - considerable dieback at top
 - severe scale insect infestation (probably obscure scale)
3. Black oak 6.5" DBH overall health: poor
comments:
 - thin canopy
 - wound at base (mechanical)
 - ant nest at 2' from base suggests decay in main stem
 - oozing at wound
 - severe scale insect infestation
4. Black oak 7.25" DBH overall health: fair
comments:
 - weak canopy
 - large dead branches
 - some scale damage
5. Zelkova 7.75" DBH overall health: fair/good
comments:
 - heat stress
 - slight tip dieback at top of canopy
6. Black oak 6.5" DBH overall health: poor
comments:
 - weak canopy
 - considerable dead wood
 - dieback at top of canopy
 - some scale damage
7. Black oak 7.25" DBH overall health: poor
comments:
 - mechanical damage on main stem
 - probable canker on main stem
 - borer insect damage
 - slight scale damage

8. Zelkova 6" DBH overall health: fair/good
comments:
-some heat stress in upper canopy
-wilting leaves
9. Black oak 9.5" DBH overall health: fair/good
comments:
-slight scale damage
10. Black oak 10.5" DBH overall health: fair
comments:
-roots circling in tree box
-some necrosis at leaf margins may be drought/heat stress
(the leaves look brown at the ends)
11. Black oak 12.5" DBH overall health: poor
comments:
-large wound at base (mechanical)
-decay has set in wound
-some borer damage
-severe necrosis on leaves
-very weak canopy
12. Black oak 10.75" DBH overall health: poor
comments:
-1/2 of canopy almost gone
-several dead branches
-roots circling main stem
-some scale damage
13. Black oak 8.25" DBH overall health: fair
comments:
-root bound in tree box
-several torn branches
-no canopy on street side
14. Zelkova 6.25" DBH overall health: good
comments:
-roots starting to circle main stem
-cupping leaves at top of canopy, drought stress

Carroll Avenue Street Trees

6950 Carroll Ave. comments:	Zelkova	4.5" DBH	overall health: fair/good
	<ul style="list-style-type: none">- some crossing branches- utility lines		
6950 Carroll Ave. comments:	Zelkova	4.5" DBH	overall health: fair/poor
	<ul style="list-style-type: none">- several dead branches- some crossing branches- utility lines- stressed		
6950 Carroll Ave. comments:	Zelkova	6" DBH	overall health: fair/poor
	<ul style="list-style-type: none">- several dead branches- some crossing branches- utility lines- stressed		
Parking lot @ 7000 Carroll Ave. comments:	Zelkova	4.5" DBH	overall health: fair
	<ul style="list-style-type: none">- several crossing branches		
Parking lot @ 7000 Carroll Ave. comments:	Zelkova	9.25" DBH	overall health: fair
	<ul style="list-style-type: none">- several crossing branches- mechanical damage in canopy over street		
6935 Carroll Ave. comments:	Zelkova	9.5" DBH	overall health: good
	<ul style="list-style-type: none">- utility lines- some mechanical damage in canopy		
7000 Carroll Ave. comments:	Black oak	6.5" DBH	overall health: poor
	<ul style="list-style-type: none">- dead, to be removed		
7002 Carroll Ave. comments:	Black oak	9.5" DBH	overall health: fair
	<ul style="list-style-type: none">- utility lines- slight scale- a lot of dead wood in canopy- very weak canopy		

7006 Carroll Ave. comments:	Black oak	13.5" DBH	overall health: fair
	<ul style="list-style-type: none"> - utility lines - some dead wood 		
7009 Carroll Ave. comments:	Black oak	8.5" DBH	overall health: poor
	<ul style="list-style-type: none"> - slight scale - a lot of dead wood in canopy - extremely weak canopy 		
7020 Carroll Ave. comments:	Black oak	14.25" DBH	overall health: fair
	<ul style="list-style-type: none"> - utility lines - significant utility line pruning - base of tree outgrowing tree box 		
7024 Carroll Ave. comments:	Black oak	9" DBH	overall health: fair
	<ul style="list-style-type: none"> - utility lines 		
7034 Carroll Ave. comments:	Black oak	4.5" DBH	overall health: poor
	<ul style="list-style-type: none"> - utility lines - mechanical damage at base - extremely weak canopy 		
7044 Carroll Ave. comments:	Black oak	4.75" DBH	overall health: fair/poor
	<ul style="list-style-type: none"> - utility lines - mechanical damage at base - weak canopy 		
7056 Carroll Ave. comments:	Black oak	7" DBH	overall health: fair
	<ul style="list-style-type: none"> - utility lines - weak canopy 		
Takoma Urban Park comments:	Pin oak	9" DBH	overall health: good
	<ul style="list-style-type: none"> - no visible problems 		
Takoma Urban Park comments:	Amur cork tree	3.25" DBH	overall health: fair/poor
	<ul style="list-style-type: none"> - extremely little growth - weak canopy 		

Takoma Urban Park comments:	Amur cork tree	4.5" DBH	overall health: fair/poor
	- very little growth		
	- weak canopy		
Takoma Urban Park comments:	Amur cork tree	4.25" DBH	overall health: fair/poor
	- very little growth		
	- weak canopy		
7050 Carroll Ave. comments:	Sourwood	<1" DBH	overall health: fair
	- mulch too high		
	- weak canopy		
	- heat stress last summer		
	- could be moved without changing the tree pit		
7054 Carroll Ave. comments:	Sourwood	<1" DBH	overall health: fair
	- mulch too high		
	- weak canopy		
	- heat stress last summer		
	- could be moved without changing the tree pit		
7056 Carroll Ave. comments:	Black oak	7" DBH	overall health: fair/poor
	- weak canopy		
	- utility lines		
	- very little growth		

Private Property Trees On Carroll Avenue (Philadelphia Ave. to DC Line)

6940 Carroll Ave. comments:	Ornamental pear	12" DBH	overall health: fair
	- base of tree 3 feet from sidewalk (w/ retaining wall)		
	- "topped" last year		
	- very restricted root zone		
6940 Carroll Ave. comments:	Ornamental pear	7" DBH	overall health: fair
	- base of tree 3 feet from sidewalk (w/ retaining wall)		
	- "topped" last year		

	- very restricted root zone		
6940 Carroll Ave. comments:	Ornamental pear 14" DBH	overall health: fair	
	- base of tree 3 feet from sidewalk (w/ retaining wall)		
	- "topped" last year		
	- very restricted root zone		
7044 Carroll Ave. comments:	White oak 25" DBH	overall health: good/fair	
	- pushing retaining wall by sidewalk		
	- restricted root zone		
Takoma Towers comments:	Red maple 4" DBH	overall health: good	
	- 4 feet from sidewalk		
Takoma Towers comments:	Norway maple 16" DBH	overall health: fair	
	- 15 feet from sidewalk		
	- some dead wood		
Takoma Towers comments:	Norway spruce 12" DBH	overall health: good	
	- severe lean		
	- 15 feet from sidewalk		
102 Park Avenue comments:	Mulberry 23" DBH	overall health: poor	
	- severe "v" crotch with split going down main stem		
	- tree could be hazardous		
	- 17 feet from sidewalk		
102 Park Avenue comments:	Red maple 24" DBH	overall health: fair/good	
	- poor branching		
	- looks like tree was "topped" a few years ago		
	- 20 feet from sidewalk		
7105 Carroll Ave. comments:	Post oak 20" DBH	overall health: poor	
	- severe wound on main stem that could be from lightning		
	- advanced decay in wound		
	- 5 feet from existing sidewalk		
7105 Carroll Ave.	Pin oak 7.5" DBH	overall health: good	

	comments:			
		- tree in good shape		
		- 14 feet from sidewalk		
7105 Carroll Ave.	Maple	6.5" DBH	overall health: good	
	comments:			
		- tree in good shape		
		- 14 feet from sidewalk		
7105 Carroll Ave.	White oak	33" DBH	overall health: fair/good	
	comments:			
		- a lot of dead wood in canopy		
		- 13 feet from sidewalk		
7107 Carroll Ave.	Red oak	3" DBH	overall health: fair/good	
	comments:			
		- some scale damage		
		- 10.5 feet from sidewalk w/ retaining wall		
7107 Carroll Ave.	White oak	32" DBH	overall health: fair	
	comments:			
		- large burl on main stem		
		- canopy one-sided, with 1/3 dead and removed		
		- fruiting bodies visible in lawn close to base of tree		
		- 28 feet from sidewalk with retaining wall		
7109 Carroll Ave.	Norway maple	7" DBH	overall health: good	
	comments:			
		- tree in good shape		
		- 9 feet from sidewalk with retaining wall		
7111 Carroll Ave.	Red oak	9" DBH	overall health: good	
	comments:			
		- close to utility lines		
		- 10 feet from sidewalk with retaining wall		
7113 Carroll Ave.	Pin oak	9.5" DBH	overall health: good	
	comments:			
		- tree in good shape		
		- 14 feet from sidewalk with retaining wall		
7115 Carroll Ave.	Sugar maple	3" DBH	overall health: good	
	comments:			
		- nice tree		
		- 14 feet from sidewalk with retaining wall		

7115 Carroll Ave. comments:	Pagoda Tree	10" DBH	overall health: good
	<ul style="list-style-type: none"> - tree in good shape - 16 feet from sidewalk with retaining wall 		
7119 Carroll Ave. comments:	Red maple	6" DBH	overall health: fair
	<ul style="list-style-type: none"> - severe wound at base - 6 feet from sidewalk with retaining wall 		
7119 Carroll Ave. comments:	Japanese maple	3" DBH	overall health: good
	<ul style="list-style-type: none"> - nice tree - 8 feet from sidewalk with retaining wall 		
7121 Carroll Ave. comments:	Deciduous magnolia	2.5" DBH	overall health: good
	<ul style="list-style-type: none"> - nice tree - 5 feet from sidewalk with retaining wall 		
7121 Carroll Ave. comments:	Red maple	10" DBH	overall health: fair
	<ul style="list-style-type: none"> - severe wound at base that could have developed into a canker - 10 feet from sidewalk with retaining wall 		
7123 Carroll Ave. comments:	Tulip poplar	5" DBH	overall health: good
	<ul style="list-style-type: none"> - nice tree - 6 feet from sidewalk with retaining wall 		
7125 Carroll Ave. comments:	Norway maple	3" DBH	overall health: poor
	<ul style="list-style-type: none"> - dying - 16 feet from sidewalk 		
7131 Carroll Ave. comments:	Norway maple	20" DBH	overall health: fair/good
	<ul style="list-style-type: none"> - some dead wood in canopy - 10.5 feet from sidewalk 		

Notes:

- The attached map shows the location of the Laurel Avenue street trees.
- The Laurel Avenue trees were evaluated in Summer of 2003 and the Carroll Avenue trees were evaluated in late Winter 2004. Evaluating trees at different times of

the year can produce different observations. For instance, a tree cannot easily be evaluated in the winter for heat stress or leaf necrosis.

- Trees in the tree boxes (street trees) have 54 cubic feet of root growing space. This is assuming the pits go straight down at the hardscape interface and are 3 feet deep.

Observations:

-The black oaks vary in new growth from 2 inches to 4 inches per year. Like red oaks, black oaks when healthy can put on 12 to 18 inches of growth per year.

-The scale damage on the black oaks would be very hard to treat. Spraying would be required annually by using either horticultural oil in the early spring or chemicals in the late spring/early summer.

-The borer damage on the black oaks would be best treated by just trying to maximize the health of the trees. Borers are secondary pests, which means they are going to attack trees already under stress from another source.

-The wounds at the base of the trees are probably due to vehicles or mowers hitting the bases of the trees.

- The wounds in the canopies of the trees are probable due to trucks hitting the canopy.

-Some type of heat stress or drought stress was present on every tree that was evaluated last summer (Laurel Avenue trees).

-The zelkovas vary in new growth from 6 inches to 8 inches per year. Healthy zelkovas can put on at least 2 feet of new growth per year.

-Though no formal bulk density test was taken, the soil seemed very compacted.

-Latin names of the street trees:

Black oak	<i>Quercus velutina</i>
Zelkova	<i>Zelkova serrata</i>
Pin oak	<i>Quercus palustris</i>
Amur cork tree	<i>Phellodendron amurense</i>
Sourwood	<i>Oxydendrom arboreum</i>

Recommendations:

- Expand existing tree pits. If they can be expanded without harming the tree roots of existing trees, recommend keeping some of the zelkovas. If they cannot be expanded without harming tree roots, then remove existing trees before pits are expanded.

- Make new tree pits as large as possible and/or to make tree root growing area as large as possible.

- Make new tree pits so large species trees can have at least 1000 cubic feet of root growing space and 400 cubic feet for small species.

- Use structural soils under new sidewalk areas to expand potential root area for trees.

- Expand root area for trees by putting structural soil under hardscape areas that interface with the tree pits.

- Plant large species trees in all areas that can support large root growing areas and no utility line issues to maximize canopy cover.

- Plant small species trees under utility lines and where root growing areas are restricted the most.

- All private property trees where the critical root zone is affected should have proper tree protection measures taken. Some measures required should be: root pruning, fencing, soil compaction protection/mitigation, and watering when appropriate.

- Large Maryland native tree species to consider:

- White oak
- Black gum
- Sugar maple
- Kentucky coffeetree
- Hickory
- American beech
- Swamp white oak
- Overcup oak
- Sycamore
- American elm (resistant cultivars)

- Large non-Maryland native tree species to consider:

- Bur oak
- London plane tree
- Zelkova
- Lace bark elm

- Small Maryland native species trees to consider:

- Red bud
- Serviceberry
- American hornbeam
- Sourwood

My opinion is to try to create the best environment possible for future tree growth. This means creating/expanding the root growing areas to be as large as possible by having larger tree pits and using structural soils under hardscape. If this means the removal of existing street trees and replacing them, I am for it. My view is that we should look at this as what is best for the street trees in the long term.

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